

SOLUTIONS



RESEARCH PROGRAMS SPRING 2005

IN THIS ISSUE

PROJECT HIGHLIGHTS

**Economic Impact of Highway
Expansion**

**[Performance Measurement Toolbox
and Reporting System for Research
Programs and Projects](#)**

[DID YOU KNOW?](#)

[LIBRARY CORNER](#)

[CALENDAR OF EVENTS](#)

[NEW RESEARCH PROJECTS](#)

[NEW RESEARCH REPORTS](#)

[CONTACT US](#)

PROJECT HIGHLIGHTS

ECONOMIC IMPACT OF HIGHWAY EXPANSION

MDT recently completed a ground-breaking study of the economic impact of highway expansion in Montana. With the guidance of a steering committee of business and government officials with expertise in economic development, the study achieved its original goals. In addition, the study produced a unique analysis tool that MDT will use to assess the economic impacts of proposed highway improvements.

The primary focus of the study was to examine the general issue of highway expansion and economic development in Montana. However, the study also gave MDT the opportunity to develop the Highway Economic Analysis Tool, or HEAT, which will enable MDT to comply with direction from the 2001 Legislature to include economic factors in its highway planning process. HEAT is the first economic analysis model in the U.S. that highway planners can use to examine highway economic impacts at the statewide, corridor, or project level.

To test HEAT, the Reconfiguration Study examined several HEAT test scenarios on representative Montana highway corridors such as U.S. Highway 93 between Evaro and Polson, Montana Highway 3 between Great Falls and Billings, and U.S. Highway 2 from the Idaho state line to the North Dakota state line. The results of these test runs are documented in the Highway Reconfiguration Study final report, which along with a project summary, is available for viewing at <http://www.mdt.mt.gov/research/reconfigstudy/>.

A consultant team led by Cambridge Systematics and Economic Development Research Group conducted the study. Both firms have national and international expertise in the links between transportation and economic development. In addition to using data from national sources, the consultant team interviewed Montana business and economic development leaders to ensure the study accurately reflected Montana economic conditions and perspectives.

Members of the Study Steering Committee included Janice Brown, Division Administrator, Federal Highway Administration; Charity Watt Levis, AAA; Vern Petersen,

CONTINUED ON PAGE 2



SOLUTIONS SPRING 2005

MONTANA DEPARTMENT OF TRANSPORTATION RESEARCH PROGRAMS

Fergus County Commission; Dan Rice, Transportation Commission and Vice President, TranSystems Inc.; Duane Kurokawa, President, Great Northern Development Corp., Wolf Point; Keith Tokerud, Chairman, Great Falls Chamber of Commerce; Mark Simonich, Director, Montana Department of Commerce; Bob Giordano, Missoula Institute for Sustainable Transportation; Joe Unterreiner, President, Kalispell Area Chamber of Commerce; Dave Gibson, Chief

Business Officer, Governor's Office; Randy Gray, Mayor of Great Falls; Mark Cole, Dick Irvin Trucking, Shelby; Michael Sanderson, Vice President, Engineering Inc., Billings; and Kent Coe, Vice President, Billings Chamber of Commerce.

For more information contact Dick Turner at 406-444-7289 or dturner@mt.gov or Sue Sillick at 406-444-7693 or ssillick@mt.gov.



PERFORMANCE MEASUREMENT TOOL BOX AND REPORTING SYSTEM FOR RESEARCH PROGRAMS AND PROJECTS

In April, Sue Sillick, Research Programs Manager, attended a meeting as project panel member for the National Cooperative Highway Research Program (NCHRP) project titled Performance Measurement Toolbox and Reporting System for Research Programs and Projects. The purpose of this project is to develop a web and CD-ROM-based system to provide research program managers and agency administrators an integrated set of aids for establishing and operating performance measurement processes within their research programs. The web-based system is the central hub of the research performance measurement system, with the CD-ROM offering additional tools. Each system can be used independently of one another; however,

the web-based system allows the additional benefits of a suite of pre-programmed reports, which can summarize research performance information for specific projects or a subset of projects, an agency's entire research program, or a nationwide annual research program. Given individual agency needs, these tools were designed to allow maximum flexibility for use. The use of this system when completed will assist MDT in accomplishing its strategic goals. This project will be completed later this year. A second phase has been approved; however, the detailed scope of this phase has not yet been determined. For more information, contact Sue Sillick at 406-444-7693 or ssillick@mt.gov.



DID YOU KNOW?

Pooled Fund Studies

The Federal Highway Administration (FHWA) sponsors the Transportation Pooled Fund (TPF) Program as a means for interested States, FHWA, and other organizations to partner when significant or widespread interest is shown in solving transportation-related problems. Partners may pool funds and other resources to solve these problems through research, planning, and technology transfer activities.

To qualify as a pooled fund study, more than one state transportation agency, federal agency, other agency such as a municipality or metropolitan planning organization, college/university, or a private company must find the subject important enough to commit funds or other resources to conduct the research, planning, and technology transfer activity. If a subject has been studied previously, the new study should provide new

information that will complement or advance previous investigations of the subject matter.

Federal and state transportation agencies may initiate pooled fund studies. Local and regional transportation agencies, private industry, foundations, and colleges/universities may partner with any or all of the sponsoring agencies to conduct pooled fund projects.

The TPF web site (<http://www.pooledfund.org/>) includes program procedures and information about all studies. To date the Montana Department of Transportation has participated in over fifty pooled fund projects (http://www.mdt.mt.gov/research/projects/mt_pool.shtml).

For further information on pooled funds contact Sue Sillick at 406-444-7693 or ssillick@mt.gov.

LIBRARY CORNER

One of the most important initial steps before conducting research is to make sure that the research has not already been conducted. This prevents “reinventing the wheel”. One other vital step that is often forgotten is to make sure the “wheel” is not in the process of being invented. The Transportation Research Board’s Research in Progress (RiP) database contains information on research that is currently in progress and can be searched via the RiP web site (<http://rip.trb.org/>). The RiP database contains over 7,800 current or recently completed transportation research projects. Most of the RiP records are projects funded by Federal and State Departments of Transportation; some university and international transportation research is also included. A search of

the RiP database before conducting research helps to prevent the duplication of efforts.

For more information, contact Sue Sillick at 406-444-7693 or ssillick@mt.gov.

Watch future newsletter issues for Library Corner articles on:

- Library Connectivity Pooled Fund Study
- Transportation Libraries Catalog (TLCat)
- Montana Library Network Group Catalog
- Literature Searches



CALENDAR OF EVENTS

June

Transit Cooperative Research Program (TCRP) Problem Statements Due – 6/15
State CEO Ballot on 2006 National Cooperative Highway Research Program (NCHRP) Due – 6/20
Montana TRB Staff Visit – 6/23-24

July

WASHTO Annual Meeting – 7/10-13
Local Technical Assistance Program (LTAP) National Meeting – 7/23-27
MDT Research Review Committee (RRC) Meeting – 7/26

August

TRB Annual Meeting Abstracts Due- 8/1
Research Advisory Committee (RAC) Meeting – 8/2-5
MDT RRC Meeting – 8/30

September

NCHRP Problem Statements Due – 9/15
AASHTO Annual Meeting – 9/16-19
MDT Library Resources Training – 9/19
LTAP Advisory Board Meeting – 9/22
MDT RRC Meeting – 9/27

October

MDT RRC Meeting – 10/25
TRB Annual Meeting Preliminary Announcement Distributed
New TCRP Projects Selected

November

NCHRP Problem Submitters' Responses to Evaluations Due

NEW RESEARCH PROJECTS

Preventative Maintenance Treatments: A Synthesis of Highway Practice
http://www.mdt.mt.gov/research/projects/pave/prevent_maint.shtml

Industry Best Practices for Applications Development
http://www.mdt.mt.gov/research/projects/admin/app_dev.shtml

A listing of all past and current projects can be found at: www.mdt.mt.gov/research/projects/sub_listing.shtml.



NEW RESEARCH REPORTS

Performance of Steel Pipe Pile to Concrete Bent Cap Connections Subject to
Seismic Loading or High Transverse Loading

<http://www.mdt.mt.gov/research/projects/structures/seismic.shtml>

Development of High-Performance Concrete Mixtures for Durable Bridge Decks
in Montana Using Locally Available Materials

http://www.mdt.mt.gov/research/projects/mat/high_concrete.shtml

Fish Passage at Road Crossings in a Montana Watershed

http://www.mdt.mt.gov/research/docs/research_proj/fish_passage/final_report.pdf

Montana Highway Reconfiguration Study

<http://www.mdt.mt.gov/research/reconfigstdy/>

A listing of all past and current projects can be found at:

www.mdt.mt.gov/research/projects/sub_listing.shtml

REMINDER

Information on research services and products, such as research and experimental project processes and reports, and technology transfer services, including our library catalog can be found on the Research web site at www.mdt.mt.gov/research.

CONTACT US

Sue Sillick – Research Manager

406-444-7693

ssillick@mt.gov

Craig Abernathy – Project Manager

406-444-6269

cabernathy@mt.gov

Jeanne Nydegger – Library Services

406-444-6125

jnydegger@mt.gov